



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/967,032	09/28/2001	Monte J. Rhoads	42390P12320	4834

7590 03/16/2005

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP
Seventh Floor
12400 Wilshire Boulevard
Los Angeles, CA 90025-1026

EXAMINER

DU, THUAN N

ART UNIT	PAPER NUMBER
----------	--------------

2116

DATE MAILED: 03/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/967,032

Applicant(s)

RHOADS, MONTE J.

Examiner

Thuan N. Du

Art Unit

2116

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 26-52 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 26-52 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>12/13/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. It is hereby acknowledged that the following papers have been received and placed of record in the file: Amendment, IDS and Drawings (all dated 12/13/04).
2. Claims 1-25 have been cancelled. Claims 26-52 have been added.
3. Claims 26-52 are presented for examination.
4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

5. Claims 26-38 and 44-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fung (U.S. Patent No. 6,859,882) and Buzzeo et al. [Buzzeo] (U.S. Patent No. 6,125,363).
6. Regarding claim 26, Fung teaches a method for dynamic server power management comprising:

determining server load conditions [col. 33, line 59] associated with a plurality of clients (client systems 70) [Fig. 1]; and

selecting one of a plurality of operational power consuming states for a processor of a server based on the server load conditions [col. 33, lines 57-59; col. 33, line 65 to col. 34, line 3; col. 34, lines 53-58; col. 35, lines 27-31; col. 38, line 65 to col. 39, line 6; col. 40, lines 33-36, 60-63].

Fung does not explicitly teach that a representation of the load associated with the clients is received.

Art Unit: 2116

Buzzeo teaches a client/server system, wherein the server receives a representation of the load associated with a plurality of clients (the requests of the connected clients) [col. 7, line 66 to col. 8, line 2].

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Fung to include the monitor means to keep track the number of the currently connected clients (and its requests) as taught by Buzzeo. The modification would increase the reliability of the system by allowing the system to accurately determine the load conditions of the server, thereby the power management could be appropriately applied to the server.

7. Regarding claim 27, Fung teaches that the selection comprises selecting from states (mode 2, mode 3) that each have a different processor core operating frequency [col. 34, lines 53-65; col. 35, lines 27-39].

8. Regarding claim 28, Fung teaches that the selection comprises selecting from a first state that has a processor core operating frequency of at least 733 MHz and a second state that has a higher processor core operating frequency than that of the first state [col. 38, lines 30-41].

9. Regarding claim 29, Fung teaches that the method further comprising determining the load conditions based on different types of client connections contributing different processing loads [col. 34, lines 11-16].

10. Regarding claim 30, Fung teaches that the selection comprises comparing the load conditions (activity) to a threshold and selecting based on the comparison [col. 27, lines 48-49].

11. Regarding claim 31, Fung teaches that the method further comprising implementing the power consuming state on the processor [col. 34, lines 53-65].

Art Unit: 2116

12. Regarding claim 32, Fung teaches that the implementing comprises providing the selected power consuming state to an operating system and implementing the power consuming state on the processor using the operating system [col. 22, lines 31-36; col. 33, lines 14-24; col. 37, line 54 to col. 38, line 19].

13. Regarding claims 33-38, Fung and Buzzeo together teach the claimed method steps. Therefore, Fung and Buzzeo together teach the instructions stored in a machine-readable medium for carrying out the claimed method steps.

14. Regarding claim 44, Fung teaches a method for dynamic server power management comprising:

determining server load conditions [col. 33, line 59] associated with a plurality of clients (client systems 70) [Fig. 1] based on at least in part on types of the connections to a server [col. 14, lines 7-20]; and

selecting a power state for a processor of the server based on the server load conditions [col. 33, lines 57-59; col. 33, line 65 to col. 34, line 3; col. 34, lines 53-58; col. 35, lines 27-31; col. 38, line 65 to col. 39, line 6; col. 40, lines 33-36, 60-63].

Fung does not explicitly teach that a representation of a network processing load based at least in part on a number of client connections to the server is determined.

Buzzeo teaches a client/server system, wherein the server determines a representation of a network processing load based at least in part on a number of client connections to the server [col. 7, line 66 to col. 8, line 2].

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Fung to include the monitor means to keep track the number

Art Unit: 2116

of the currently connected clients (and its requests) as taught by Buzzeo. The modification would increase the reliability of the system by allowing the system to accurately determine the load conditions of the server, thereby the power management could be appropriately applied to the server.

15. Regarding claim 45, Buzzeo teaches that the connection of the client to the server is determined to be secure or un-secure [col. 8, lines 4-6].

16. Regarding claim 46, Fung teaches that the selection comprises selecting the power state from one of a plurality of operational power consuming states including a first state having a first processor core operating frequency and a second state having a second, higher processor core operating frequency [col. 38, lines 30-41].

17. Regarding claim 47, Fung teaches that the selection comprises comparing the load conditions (activity) to a threshold and selecting based on the comparison [col. 27, lines 48-49].

18. Regarding claim 48, Fung teaches that the method further comprising implementing the power state on the processor [col. 34, lines 53-65].

19. Regarding claims 49-52, Fung and Buzzeo together teach the claimed method steps. Therefore, Fung and Buzzeo together teach the instructions stored in a machine-readable medium for carrying out the claimed method steps.

20. Claims 39-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fung (U.S. Patent No. 6,859,882) and Hobson (U.S. Patent No. 6,360,327).

21. Regarding claim 39, Fung teaches a server comprising:
a processor [col. 6, lines 16-17; col. 20, line 7];

Art Unit: 2116

a network interface to receive a network processing load from a plurality of clients of a network [col. 20, lines 12-13; col. 7, lines 3-4]; and

a flash memory (flash ROM 237) having stored thereon instructions [col. 20, lines 15-16; col. 26, lines 61-62];

wherein a power state for the processor is selected, from a plurality of operational power states, based at least in part on the network processing load [col. 33, lines 57-59; col. 33, line 65 to col. 34, line 3; col. 34, lines 53-58; col. 35, lines 27-31; col. 38, line 65 to col. 39, line 6; col. 40, lines 33-36, 60-63].

Fung does not explicitly teach the instructions stored in the flash memory is power state selection instructions.

Hobson teaches a system for managing power consumption comprising a processor, flash memory (BIOS ROM), wherein the flash memory having stored thereon power state selection instructions that if executed cause a system to select a power state for the processor from a plurality of operational power states [col. 2, lines 2-18].

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Fung to store power state selection instructions in the flash memory as taught by Hobson. The modification would allow the system to be compatible with "BIOS power management" [Hobson, col. 2, line 12].

22. Regarding claim 40, Fung teaches that the selection comprises selecting from states (mode 2, mode 3) that each have a different processor core operating frequency [col. 34, lines 53-65; col. 35, lines 27-39].

Art Unit: 2116

23. Regarding claim 41, Fung teaches that the selection comprises comparing the load conditions (activity) to a threshold and selecting based on the comparison [col. 27, lines 48-49].

24. Regarding claim 42, Fung teaches the system further comprising a power state implementation to implement the power state on the processor [col. 34, lines 53-65].

25. Regarding claim 43, Fung teaches that the power state implementation system comprises at least a portion of an operating system [col. 22, lines 31-36; col. 33, lines 14-24; col. 37, line 54 to col. 38, line 19].

Conclusion

26. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

27. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thuan N. Du whose telephone number is (571) 272-3673. The

Art Unit: 2116

examiner can normally be reached on Monday and Wednesday-Friday: 9:30 AM - 8:00 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne H. Browne can be reached on (571) 272-3670.

Central TC telephone number is (571) 272-2100.

The fax number for the organization is (703) 872-9306.

28. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).



Thuan N. Du
March 10, 2005